Maryland Lyme Disease (LD) Case Report Form

PATIENT INFORMATION

NAME OF PATIENT – LAST **FIRST** **M**

TELEPHONE NUMBERS
Home: Workplace:

DATE reported to HD:

NEDSS:
CAS

Address:

Zip Code:

County of Residence:

Sex: ☐ Male ☐ Female ☐ Unknown

Date of birth: (mmddyyyy)

Hispanic Ethnicity:
☐yes ☐no ☐unknown

Race: ☐American Indian or Alaskan Native ☐Asian ☐Black or African American ☐White ☐Native Hawaiian or Pacific Islander ☐Unknown

PHYSICIAN / PROVIDER INFORMATION

Physician:

Phone:

FAX:

LABORATORY FINDINGS

EIA/IFA (IgM and/or IgG) ☐ **positive** ☐ **equivocal** ☐ **negative** ☐ **not done**
☐ check if assay uses C6 peptide
Specimen collection date: *(if not serum, specify):*

Western Blot (WB)
Specimen collection date:
(if not serum, specify):

Please indicate positive WB bands, if known.
*For **IgM, 2 of 3 bands** must be positive*
*For **IgG, 5 of 10 bands** must be positive*

IgM: ☐ **positive** ☐ **negative** ☐ **not done**
☐41kDa (FlaB) ☐39 kDa (BmpA) ☐21-25 kDa (OspC)

IgG: ☐ **positive** ☐ **negative** ☐ **not done**
☐93 kDa ☐66 kDa ☐58 kDa ☐45 kDa ☐41 kDa
☐39 kDa ☐30 kDa ☐28 kDa ☐21 kDa ☐18 kDa

Other tests *(check what applies):*
☐ *B. burgdorferi* cultured
☐ CSF titer higher than serum titer*?
☐ Other *(please specify):*

Specimen collection date:

EXPOSURE AND CLINICAL SIGNS AND SYMPTOMS

Did the health care provider diagnose the patient with LD? ☐ **yes** ☐ **no**

Date of LD **diagnosis:**

Date of symptom **onset**:

Exposure: If EM is present, was the patient in potential tick habitats in a Lyme disease endemic county ≤30 days before onset?

☐ **yes** ☐ **no** ☐ **unknown**

If yes, where: County

State

Case definition signs and symptoms

	yes	no	unknown
EM rash *(> 5 cm in diameter)*	☐	☐	☐
Arthritis *(objective episodes of joint swelling)*	☐	☐	☐
Bells palsy or other cranial neuritis	☐	☐	☐
Radiculoneuropathy	☐	☐	☐
Lymphocytic meningitis	☐	☐	☐
Encephalomyelitis*	☐	☐	☐
**If encephalomyelitis is checked, CSF titer must be higher than serum titer*			
2nd or 3rd degree atrioventricular block	☐	☐	☐

Non-confirmatory signs and symptoms
(check all that apply):

☐ Arthralgias
☐ Bundle branch block
☐ Cognitive impairment
☐ Encephalopathy
☐ Fatigue
☐ Fever/Sweats/Chills
☐ Headache
☐ Myalgias
☐ Myocarditis
☐ Neck pain
☐ Other rash
☐ Palpitations
☐ Paresthesias
☐ Peripheral neuropathy
☐ Visual/auditory impairment
☐ Symptom(s) not listed

SUPPLEMENTAL INFORMATION

Was the patient pregnant at the time of illness? ☐ yes ☐ no ☐ unknown

If the patient had EM, was there: ☐ A single EM *or* ☐ multiple EM rashes

Was the patient hospitalized for this illness? ☐ yes ☐ no ☐ unknown

Antibiotics used for this illness (check all that apply): ☐ doxycycline ☐ ceftriaxone ☐ penicillin ☐ amoxicillin ☐ azithromycin ☐ cefuroxime axetil ☐ other:

Combined duration of antibiotics for this illness: ☐ <1 month ☐ 1 - 3 months ☐ >3 months

-----FOR HEALTH DEPARTMENT *SURVEILLANCE* USE ONLY-----

Confirmed Case
☐ EM with potential exposure in a LD endemic county <30 days before illness, *or*
☐ EM with lab evidence of infection and without potential exposure in a LD endemic county <30 days before illness, *or*
☐ at least one late confirmatory clinical signs and symptoms with lab evidence of infection

☐ **Probable Case**
Physician diagnosed LD with non-confirmatory signs and symptoms,
and
laboratory evidence of infection

Suspect Case
☐ EM without potential exposure in a LD endemic county <30 days before illness and without any laboratory evidence of infection, *or*
☐ No clinical information but laboratory evidence of infection (i.e. a laboratory report only)

LYME DISEASE (LD) SURVEILLANCE CASE DEFINITION (07-ID-11)

Clinical description:
A systemic, tickborne disease with protean manifestations, including dermatologic, rheumatologic, neurologic, and cardiac abnormalities. The best clinical marker for the disease is the initial skin lesion (i.e., erythema migrans {EM}) that occurs in 60%-80% of patients.

Surveillance case definition:
This surveillance case definition was developed for national reporting of Lyme disease; it is not intended to be used in clinical diagnosis.

Case classifications:

Confirmed case:

- EM with a known exposure (as defined below), *or*
- EM with laboratory evidence (as defined below) of infection and without a known exposure, *or*
- At least one late manifestation that has laboratory evidence of infection

Probable:

- Physician-diagnosed LD that has laboratory evidence of infection with non-confirmatory* signs and symptoms

Suspect:

- A case of EM where there is no known exposure and no evidence of infection, *or*
- A case with laboratory evidence of infection but no clinical information available (e.g. a laboratory report)

Definitions and Clarifications:

Erythema migrans (EM). For purposes of surveillance, EM is defined as a skin lesion that typically begins as a red macule or papule and expands over a period of days to weeks to form a large round lesion, often with partial central clearing. A single primary lesion must reach greater than or equal to 5 cm in size. Secondary lesions also may occur. Annular erythematous lesions occurring within several hours of a tick bite represent hypersensitivity reactions and do not qualify as EM. For most patients, the expanding EM lesion is accompanied by other acute symptoms, particularly fatigue, fever, headache, mildly stiff neck, arthralgia, or myalgia. These symptoms are typically intermittent.

The diagnosis of EM must be made by a physician. Laboratory confirmation is recommended for persons with no known exposure.

Confirmatory late manifestations include any of the following when an alternate explanation is not found:

1. Musculoskeletal system. Recurrent, brief attacks (weeks or months) of objective joint swelling in one or a few joints, sometimes followed by chronic arthritis in one or a few joints. Manifestations not considered as criteria for diagnosis include chronic progressive arthritis not preceded by brief attacks and chronic symmetrical polyarthritis.
2. Nervous system. Any of the following, alone or in combination: lymphocytic meningitis; cranial neuritis, particularly facial palsy (may be bilateral); radiculoneuropathy; or, rarely, encephalomyelitis. Encephalomyelitis must be confirmed by demonstration of antibody production against B. burgdorferi in the CSF, evidenced by a higher titer of antibody in CSF than in serum.
3. Cardiovascular system. Acute onset of high-grade (2nd-degree or 3rd-degree) atrioventricular conduction defects that resolve in days to weeks and are sometimes associated with myocarditis.

***Non-confirmatory.** Non-confirmatory signs and symptoms include:
Fever, sweats, chills, fatigue, neck pain, arthalgias, myalgias, fibromyalgia syndromes, cognitive impairment, headache, paresthesias, visual/auditory impairment, peripheral neuropathy, encephalopathy, palpitations, bradycardia, bundle branch block, myocarditis, or other rash.

Exposure. Exposure is defined as having been (≤ 30 days before onset of EM) in wooded, brushy, or grassy areas (i.e., potential tick habitats) in a county in which Lyme disease is endemic. A history of tick bite is not required.

Disease endemic to county. A county in which Lyme disease is endemic in which at least two confirmed cases have been acquired in the county or in which established populations of a known tick vector are infected with *B. burgdorferi*.

Laboratory evidence. For the purpose of surveillance, the definition of a qualified laboratory assay is

1. A positive culture for *B. burgdorferi*,
2. Two-tier testing with IgM or IgG immunoblot seropositive interpreted using established criteria.
   Note: A positive IgM test result alone is not recommended for use in determining active disease in persons with illness greater than 1 month's duration because the likelihood of a false-positive test result for a current infection is high in these persons.
3. Single-tier IgG immunoblot seropositive interpreted using established criteria. Additional assays may be added based on periodic review of the scientific literature and strong evidence of comparable or better performance than qualifying assays.